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SEQUENCE LISTING

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Morikawa, Masayuki

<120> Methods For Treating Ischemic Diseases

<130> 50026/054001

<150> PCT/JP04/000957  
<151> 2004-01-30

<150> JP 2003-040806  
<151> 2003-02-19

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Ile Gln Leu Leu Glu Asn Ser Leu Ser Thr Tyr Lys Leu Glu Lys Gln	
165 170 175	
ctt ctt caa cag aca aat gaa atc ttg aag atc cat gaa aaa aac agt	576
Leu Leu Gln Gln Thr Asn Glu Ile Leu Lys Ile His Glu Lys Asn Ser	
180 185 190	
tta tta gaa cat aaa atc tta gaa atg gaa gga aaa cac aag gaa gag	624
Leu Leu Glu His Lys Ile Leu Glu Met Glu Gly Lys His Lys Glu Glu	
195 200 205	
ttg gac acc tta aag gaa gag aaa gag aac ctt caa ggc ttg gtt act	672
Leu Asp Thr Leu Lys Glu Glu Lys Glu Asn Leu Gln Gly Leu Val Thr	
210 215 220	
cgt caa aca tat ata atc cag gag ctg gaa aag caa tta aac aga gct	720
Arg Gln Thr Tyr Ile Ile Gln Glu Leu Glu Lys Gln Leu Asn Arg Ala	
225 230 235 240	
acc acc aac aac agt gtc ctt cag aag cag caa ctg gag ctg atg gac	768
Thr Thr Asn Asn Ser Val Leu Gln Lys Gln Gln Leu Glu Leu Met Asp	
245 250 255	
aca gtc cac aac ctt gtc aat ctt tgc act aaa gaa ggt gtt tta cta	816
Thr Val His Asn Leu Val Asn Leu Cys Thr Lys Glu Gly Val Leu Leu	
260 265 270	
aag gga gga aaa aga gag gaa gag aaa cca ttt aga gac tgt gca gat	864
Lys Gly Gly Lys Arg Glu Glu Lys Pro Phe Arg Asp Cys Ala Asp	
275 280 285	
gta tat caa gct ggt ttt aat aaa agt gga atc tac act att tat att	912
Val Tyr Gln Ala Gly Phe Asn Lys Ser Gly Ile Tyr Thr Ile Tyr Ile	
290 295 300	
aat aat atg cca gaa ccc aaa aag gtg ttt tgc aat atg gat gtc aat	960
Asn Asn Met Pro Glu Pro Lys Lys Val Phe Cys Asn Met Asp Val Asn	
305 310 315 320	
ggg gga ggt tgg act gta ata caa cat cgt gaa gat gga agt cta gat	1008
Gly Gly Trp Thr Val Ile Gln His Arg Glu Asp Gly Ser Leu Asp	
325 330 335	
ttc caa aga ggc tgg aag gaa tat aaa atg ggt ttt gga aat ccc tcc	1056
Phe Gln Arg Gly Trp Lys Glu Tyr Lys Met Gly Phe Gly Asn Pro Ser	
340 345 350	
ggt gaa tat tgg ctg ggg aat gag ttt att ttt gcc att acc agt cag	1104
Gly Glu Tyr Trp Leu Gly Asn Glu Phe Ile Phe Ala Ile Thr Ser Gln	
355 360 365	

agg cag tac atg cta aga att gag tta atg gac tgg gaa ggg aac cga	370	375	380	1152
Arg Gln Tyr Met Leu Arg Ile Glu Leu Met Asp Trp Glu Gly Asn Arg				
gcc tat tca cag tat gac aga ttc cac ata gga aat gaa aag caa aac	385	390	395	1200
Ala Tyr Ser Gln Tyr Asp Arg Phe His Ile Gly Asn Glu Lys Gln Asn				
tat agg ttg tat tta aaa ggt cac act ggg aca gca gga aaa cag agc	405	410	415	1248
Tyr Arg Leu Tyr Leu Lys Gly His Thr Gly Thr Ala Gly Lys Gln Ser				
agc ctg atc tta cac ggt gct gat ttc agc act aaa gat gct gat aat	420	425	430	1296
Ser Leu Ile Leu His Gly Ala Asp Phe Ser Thr Lys Asp Ala Asp Asn				
gac aac tgt atg tgc aaa tgt gcc ctc atg tta aca gga gga tgg tgg	435	440	445	1344
Asp Asn Cys Met Cys Lys Cys Ala Leu Met Leu Thr Gly Gly Trp Trp				
ttt gat gct tgt ggc ccc tcc aat cta aat gga atg ttc tat act gcg	450	455	460	1392
Phe Asp Ala Cys Gly Pro Ser Asn Leu Asn Gly Met Phe Tyr Thr Ala				
gga caa aac cat gga aaa ctg aat ggg ata aag tgg cac tac ttc aaa	465	470	475	1440
Gly Gln Asn His Gly Lys Leu Asn Gly Ile Lys Trp His Tyr Phe Lys				
ggg ccc agt tac tcc tta cgt tcc aca act atg atg att cga cct tta	485	490	495	1488
Gly Pro Ser Tyr Ser Leu Arg Ser Thr Thr Met Met Ile Arg Pro Leu				
gat ttt				1494
Asp Phe				

<210> 4  
 <211> 498  
 <212> PRT  
 <213> Homo sapiens

<400> 4				
Met Thr Val Phe Leu Ser Phe Ala Phe Leu Ala Ala Ile Leu Thr His	1	5	10	15
Ile Gly Cys Ser Asn Gln Arg Arg Ser Pro Glu Asn Ser Gly Arg Arg	20	25	30	
Tyr Asn Arg Ile Gln His Gly Gln Cys Ala Tyr Thr Phe Ile Leu Pro	35	40	45	
Glu His Asp Gly Asn Cys Arg Glu Ser Thr Thr Asp Gln Tyr Asn Thr	50	55	60	
Asn Ala Leu Gln Arg Asp Ala Pro His Val Glu Pro Asp Phe Ser Ser	65	70	75	80
Gln Lys Leu Gln His Leu Glu His Val Met Glu Asn Tyr Thr Gln Trp	85	90	95	
Leu Gln Lys Leu Glu Asn Tyr Ile Val Glu Asn Met Lys Ser Glu Met	100	105	110	

Ala Gln Ile Gln Gln Asn Ala Val Gln Asn His Thr Ala Thr Met Leu  
 115 120 125  
 Glu Ile Gly Thr Ser Leu Leu Ser Gln Thr Ala Glu Gln Thr Arg Lys  
 130 135 140  
 Leu Thr Asp Val Glu Thr Gln Val Leu Asn Gln Thr Ser Arg Leu Glu  
 145 150 155 160  
 Ile Gln Leu Leu Glu Asn Ser Leu Ser Thr Tyr Lys Leu Glu Lys Gln  
 165 170 175  
 Leu Leu Gln Gln Thr Asn Glu Ile Leu Lys Ile His Glu Lys Asn Ser  
 180 185 190  
 Leu Leu Glu His Lys Ile Leu Glu Met Glu Gly Lys His Lys Glu Glu  
 195 200 205  
 Leu Asp Thr Leu Lys Glu Glu Lys Glu Asn Leu Gln Gly Leu Val Thr  
 210 215 220  
 Arg Gln Thr Tyr Ile Ile Gln Glu Leu Glu Lys Gln Leu Asn Arg Ala  
 225 230 235 240  
 Thr Thr Asn Asn Ser Val Leu Gln Lys Gln Gln Leu Glu Leu Met Asp  
 245 250 255  
 Thr Val His Asn Leu Val Asn Leu Cys Thr Lys Glu Gly Val Leu Leu  
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 Lys Gly Gly Lys Arg Glu Glu Lys Pro Phe Arg Asp Cys Ala Asp  
 275 280 285  
 Val Tyr Gln Ala Gly Phe Asn Lys Ser Gly Ile Tyr Thr Ile Tyr Ile  
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 Asn Asn Met Pro Glu Pro Lys Lys Val Phe Cys Asn Met Asp Val Asn  
 305 310 315 320  
 Gly Gly Gly Trp Thr Val Ile Gln His Arg Glu Asp Gly Ser Leu Asp  
 325 330 335  
 Phe Gln Arg Gly Trp Lys Glu Tyr Lys Met Gly Phe Gly Asn Pro Ser  
 340 345 350  
 Gly Glu Tyr Trp Leu Gly Asn Glu Phe Ile Phe Ala Ile Thr Ser Gln  
 355 360 365  
 Arg Gln Tyr Met Leu Arg Ile Glu Leu Met Asp Trp Glu Gly Asn Arg  
 370 375 380  
 Ala Tyr Ser Gln Tyr Asp Arg Phe His Ile Gly Asn Glu Lys Gln Asn  
 385 390 395 400  
 Tyr Arg Leu Tyr Leu Lys Gly His Thr Gly Thr Ala Gly Lys Gln Ser  
 405 410 415  
 Ser Leu Ile Leu His Gly Ala Asp Phe Ser Thr Lys Asp Ala Asp Asn  
 420 425 430  
 Asp Asn Cys Met Cys Lys Cys Ala Leu Met Leu Thr Gly Gly Trp Trp  
 435 440 445  
 Phe Asp Ala Cys Gly Pro Ser Asn Leu Asn Gly Met Phe Tyr Thr Ala  
 450 455 460  
 Gly Gln Asn His Gly Lys Leu Asn Gly Ile Lys Trp His Tyr Phe Lys  
 465 470 475 480  
 Gly Pro Ser Tyr Ser Leu Arg Ser Thr Thr Met Met Ile Arg Pro Leu  
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 Asp Phe

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<220>

<223> Artificially synthesized sequence

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<210> 6

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> an artificially synthesized primer

<400> 6

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30

<210> 7

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> an artificially synthesized primer

<400> 7

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24

<210> 8  
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<212> DNA  
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<400> 8  
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20

<210> 9  
<211> 20  
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20